Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for inactivating hepatitis C virus (HCV) in a patient comprising administering to said patient a modified siRNA in an effective amount to inactivate said virus, wherein said modified siRNA targets an HCV nucleotide sequence selected from the group consisting of 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5.

2. (Previously Presented) The method of claim 1, wherein said modified siRNA is a 2' modified siRNA modified at the 2' position of at least one ribonucleotide.

3. (Canceled)

4. (Previously Presented) The method of claim 2, wherein said modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.

5. (Original) The method of claim 4, wherein said fluoro-modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.

6. (Previously Presented) The method of claim 5, wherein at least one pyrimidines of said siRNA is modified, and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

7. (Original) The method of claim 1, wherein both strands of said siRNA contain at least one modified nucleotide.

8. (Canceled)

9. (Canceled)

10. (Previously Presented) The method of claim 1, wherein said siRNA is prepared by

(a) identifying a target nucleotide sequence in 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, or the sequence targeted by siRNA5 for designing a small interfering RNA (siRNA); and

(b) producing an siRNA that has been modified to contain at least one modified nucleotide.

11. (Canceled)

12. (Canceled)

13. (Previously Presented) The method of claim 1 or 10, wherein said siRNA is siRNA5, siRNAC1, siRNAC2, siRNA5B1, siRNA5B2 or siRNA5B4.

14. (Previously Presented) A modified siRNA comprising at least one modified ribonucleotide, wherein said siRNA is resistant to RNase and retains the ability to inhibit hepatitis C virus (HCV) replication, and wherein said modified siRNA targets an HCV nucleotide sequence selected from the group consisting of 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5.

15. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is a 2' modified siRNA modified at the 2' position of at least one ribonucleotide.

16. (Canceled)

17. (Previously Presented) The modified siRNA of claim 15, wherein the modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.

18. (Previously Presented) The modified siRNA of claim 17, wherein said fluoro-modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.

19. (Previously Presented) The modified siRNA of claim 18, wherein at least one pyrimidine of said siRNA is modified, and said at least one pyrimidines is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

20. (Previously Presented) The modified siRNA of claim 14, wherein both strands of the siRNA contains at least one modified nucleotide.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Previously Presented) A method of making a modified siRNA that targets a nucleic acid sequence in hepatitis C virus (HCV) comprising:

(a) preparing a modified-double stranded RNA (dsRNA) fragment containing at least one modified ribonucleotide in at least one strand that spans 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, or the sequence targeted by siRNA5; and

(b) cleaving said modified-dsRNA fragments with Dicer resulting in at least one modified siRNA that targets an HCV nucleotide sequence selected from the group consisting of

3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5.

25. (Previously Presented) The method of claim 24, further comprising:

(c) isolating said at least one modified siRNA.

26. (Canceled)

27. (Canceled)

28. (Previously Presented) A method for inactivating hepatitis C virus (HCV) in a patient comprising administering to said patient a modified siRNA consisting of about 10 to about 30 ribonucleotides in an effective amount to inactivate said virus, wherein said modified siRNA targets an HCV nucleotide sequence selected from the group consisting of 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5.

29. (Original) The method of claim 28, wherein said modified siRNA consists of about 19 to about 23 ribonucleotides.

30. (Previously Presented) The method of claim 28, wherein said modified siRNA is a 2' modified siRNA modified at the 2' position of at least one ribonucleotide.

31. (Canceled)

32. (Previously Presented) The method of claim 30, wherein said modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.

33. (Original) The method of claim 32, wherein said fluoro-modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.

34. (Previously Presented) The method of claim 33, wherein at least one pyrimidine of said siRNA is modified and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

35. (Previously Presented) The method of claim 28, wherein both strands of said siRNA contain at least one modified nucleotide.

36. (Canceled)

37. (Canceled)

38. (Previously Presented) The method of claim 28, wherein said siRNA is prepared by

(a) identifying a target nucleotide sequence in 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, or the sequence targeted by siRNA5 for designing a small interfering RNA (siRNA); and

(b) producing an siRNA that has been modified to contain at least one modified nucleotide.

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Previously Presented) The method of claim 28, wherein said siRNA is siRNA5, siRNAC1, siRNAC2, siRNA5B1, siRNA5B2 or siRNA5B4.

43. (Previously Presented) A double-stranded RNA molecule of from about 10 to about 30 nucleotides that inhibits replication of hepatitis C virus (HCV) and targets an HCV

nucleotide sequence selected from the group consisting of 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5.

44. (Original) The double-stranded RNA molecule of claim 43 comprising a nucleotide sequence at least 80% identical to the nucleotide sequence of siRNA5, siRNAC1, siRNAC2, siRNA5B1, siRNA5B2 or siRNA5B4.

45. (Previously Presented) A method of inducing targeted RNA interference toward HCV in hepatic cells, comprising administering the double-stranded RNA molecule of claim 43 to hepatic cells, wherein the nucleotide sequence of said double-stranded RNA molecule corresponds to the targeted HCV nucleotide sequence.

46. (Original) A method of inhibiting replication of hepatitis C virus (HCV), comprising administering the RNA polynucleotide molecule of claim 44 to cells infected with HCV.

47. (Original) A vector comprising a DNA segment encoding the RNA molecule of claim 43.

48. (Previously Presented) The vector of claim 47, wherein the sense strand of said double-stranded RNA molecule is operably linked to a first promoter and wherein the antisense strand of said double-stranded RNA molecule is operably linked to a second promoter.

49. (Original) The vector of claim 48, wherein said first and second promoters are selected from the group consisting of U6 and H1.

50. (Original) The vector of claim 48 wherein said first and second promoters are the same.

51. (Original) The vector of claim 47, wherein the sense and antisense strands of said RNA molecule are under the control of a single promoter.

52. (Original) The vector of claim 51, wherein said single promoter is selected from the group consisting of U6 and H1.

53. (Original) A host cell comprising the vector of claim 47.

54. (Original) A method of inhibiting replication of hepatitis C virus (HCV) in cells carrying HCV, comprising transfecting said cells with the vector of claim 47.

55. (Previously Presented) A method of treating hepatitis C in a subject in need thereof, comprising administering a composition comprising a therapeutically effective amount of the RNA molecule of claim 43 to said subject.

56. (Original) A method of treating hepatitis C in a subject in need thereof, comprising administering the vector of claim 47 to said subject.

57. (Previously Presented) A modified siRNA molecule, comprising a double-stranded RNA molecule of from about 10 to about 30 nucleotides in length, which mediates RNA interference toward hepatitis C virus (HCV) and targets an HCV nucleotide sequence selected from the group consisting of 3'-untranslated region (3'-UTR), NS3 helicase, C1, C2, C3, C4, C5, 5B1, 5B2, 5B3, 5B4, 5B5, 5B6, 5B7, 5B8, 5U8, 5U9, 5U10, and the sequence targeted by siRNA5, and which is linked to at least one receptor-binding ligand.

58. (Original) The modified siRNA molecule of claim 57, wherein said receptor-binding ligand is attached to a 5'-end or 3'-end of said siRNA molecule.

59. (Original) The modified siRNA molecule of claim 58, wherein said receptor binding ligand is attached to multiple ends of said siRNA molecule.

60. (Original) The modified siRNA molecule of claim 57, wherein said receptor-binding ligand is selected from the group consisting of a cholesterol, an HBV surface antigen, low-density lipoprotein, an HIV-1 surface antigen, an influenza virus surface antigen, an RSV surface antigen, an HPV surface antigen and a polio virus surface antigen.

61. (Original) The modified siRNA molecule of claim 60, wherein said receptor-binding ligand is cholesterol.

62. (Original) The modified siRNA molecule of claim 57, further comprising a modification at the 2' position of at least one ribonucleotide, which modification at the 2' position of at least one ribonucleotide renders said siRNA resistant to degradation.

63. (Canceled)

64. (Original) A method of inducing targeted RNA interference in a patient, comprising administering to said patient an effective amount of the siRNA of claim 57.

65. (Original) A method of inducing targeted RNA interference in a patient, comprising administering to said patient an effective amount of the siRNA of claim 61.

66. (Original) A method of inducing targeted RNA interference in a patient, comprising administering to said patient an effective amount of the siRNA of claim 63.

67. (Previously Presented) The method of claim 1, wherein said modified siRNA is modified in at least one nucleotide base.

68. (Previously Presented) The method of claim 67, wherein at least one pyrimidine of said siRNA is modified, and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

69. (Previously Presented) The method of claim 1, wherein said modified siRNA is modified in at least one phosphate linkage.

70. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is modified in at least one nucleotide base.

71. (Previously Presented) The modified siRNA of claim 70, wherein at least one pyrimidine of said siRNA is modified, and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

72. (Previously Presented) The modified siRNA of claim 14, wherein said modified siRNA is modified in at least one phosphate linkage.

73. (Previously Presented) The method of claim 28, wherein said modified siRNA is modified in at least one nucleotide base.

74. (Previously Presented) The method of claim 73, wherein at least one pyrimidine of said siRNA is modified, and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

75. (Previously Presented) The method of claim 28, wherein said modified siRNA is modified in at least one phosphate linkage.

76. (Previously Presented) The modified siRNA molecule of claim 62, wherein said 2'-modification is selected from the group consisting of fluoro-, methyl-, methoxyethyl- and propyl-modification.

77. (Previously Presented) The modified siRNA molecule of claim 76, wherein said fluoro- modification is a 2'-fluoro-modification or a 2',2'-fluoro-modification.

78. (Previously Presented) The modified siRNA molecule of claim 57, wherein said modified siRNA is modified in at least one nucleotide base.

79. (Previously Presented) The modified siRNA molecule of claim 78, wherein at least one pyrimidine of said siRNA is modified, and said at least one pyrimidine is cytosine, a derivative of cytosine, uracil, a derivative of uracil or a combination thereof.

80. (Previously Presented) The modified siRNA molecule of claim 57, wherein said modified siRNA is modified in at least one phosphate linkage.

81. (Previously Presented) The modified siRNA of claim 14 comprising a nucleotide sequence at least 80% identical to the nucleotide sequence of siRNA5, siRNAC1, siRNAC2, siRNA5B1, siRNA5B2 or siRNA5B4.